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1.2.9. SDG 9 | Industry, Innovation and Infrastructure | Build infrastructure, promote inclusive and sustainable industrialization and foster innovation

Table 1.2.9. Learning objectives for SDG 9 “Industry, Innovation and Infrastructure”	
Cognitive learning objectives	<ol style="list-style-type: none"> 1. The learner understands the concepts of sustainable infrastructure and industrialization and society's needs for a systemic approach to their development. 2. The learner understands the local, national and global challenges and conflicts in achieving sustainability in infrastructure and industrialization. 3. The learner can define the term resilience in the context of infrastructure and spatial planning, understanding key concepts such as modularity and diversity, and apply it to their local community and nationwide. 4. The learner knows the pitfalls of unsustainable industrialization and in contrast knows examples of resilient, inclusive, sustainable industrial development and the need for contingency planning. 5. The learner is aware of new opportunities and markets for sustainability innovation, resilient infrastructure and industrial development.
Socio-emotional learning objectives	<ol style="list-style-type: none"> 1. The learner is able to argue for sustainable, resilient and inclusive infrastructure in their local area. 2. The learner is able to encourage their communities to shift their infrastructure and industrial development toward more resilient and sustainable forms. 3. The learner is able to find collaborators to develop sustainable and contextual industries that respond to our shifting challenges and also to reach new markets. 4. The learner is able to recognize and reflect on their own personal demands on the local infrastructure such as their carbon and water footprints and food miles. 5. The learner is able to understand that with changing resource availability (e. g. peak oil, peak everything) and other external shocks and stresses (e. g. natural hazards, conflicts) their own perspective and demands on infrastructure may need to shift radically regarding availability of renewable energy for ICT, transport options, sanitation options, etc.
Behavioural learning objectives	<ol style="list-style-type: none"> 1. The learner is able to identify opportunities in their own culture and nation for greener and more resilient approaches to infrastructure, understanding their overall benefits for societies, especially with regard to disaster risk reduction. 2. The learner is able to evaluate various forms of industrialization and compare their resilience. 3. The learner is able to innovate and develop sustainable enterprises to respond to their countries' industrial needs. 4. The learner is able to access financial services such as loans or microfinance to support their own enterprises. 5. The learner is able to work with decision-makers to improve the uptake of sustainable infrastructure (including internet access).



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Competencies in TVET

	Knowledge & Understanding	Skills & Applications	Values & Attitudes
TVET	<ul style="list-style-type: none"> Understanding of concepts of sustainable infrastructure and industrialisation, and challenges in achieving sustainability. Knowledge of systemic and sustainable approach to their development. An awareness of new opportunities and markets for sustainability innovation, infrastructure and industrial development. Understanding of value chains and markets. Understanding of different regional, national and trans border needs and challenges. Understanding of sustainability, environmental and health standards in industry. 	<ul style="list-style-type: none"> Application of specialised skills to build resilient infrastructures, environmentally sustainable technologies and more sustainable industrialisation. Holistic analysis and application of best practice. Planning and design of sustainable infrastructure and management systems. Entrepreneurship. Development of entrepreneurial opportunities and small-scale industrial services. Development and upgrading of technologies; provision of technical support. Innovation to contribute to sustainable infrastructure and development. 	<ul style="list-style-type: none"> Developing an awareness/consciousness of the need for sustainability. Proactive in mainstreaming of sustainable infrastructure. Resilient and sustainable economic development. Cooperation and capacity building. Greening of industry, infrastructure and service provision. Appreciation for the need for decent work. Awareness of social and environmental impacts of industrialisation and infrastructure choices. Promotion of best practice and upholding industry standards. Corporate responsibility.

References

Commonwealth Secretariat (2017). *Curriculum Framework for Enabling the Sustainable Development Goals*. Retrieved from <https://www.thecommonwealth-educationhub.net/frameworkforsdgs/>

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